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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,996	11/04/2003	Frank Breme	034183/268724	5622
826	7590	05/19/2004	EXAMINER	
ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			VERSTEEG, STEVEN H	
			ART UNIT	PAPER NUMBER
			1753	

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/700,996	Applicant(s) BREME, FRANK	
	Examiner Steven H VerSteeg	Art Unit 1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-3, 7, 8, 10, 11, 13 and 14 is/are rejected.
7) ☒ Claim(s) 4-6, 9 and 12 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 04 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/25/03</u> . | 6) <input checked="" type="checkbox"/> Other: <u>IDS filed 11/4/03</u> . |

DETAILED ACTION

Claim Objections

1. Claim 8 is objected to because of the following informalities: "with" needs deleted in line 5. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 7, 8, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 7 recites the limitation "the further system of layers applied on the second side" in lines 5-6. There is insufficient antecedent basis for this limitation in the claim.
5. Claim 8 depends from claim 7 and contains all of the limitations of claim 7. Therefore, claim 8 is rejected for the same reasons as claim 7.
6. Claim 11 recites the limitation "the front side" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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8. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,143,143 to Walls et al. (Walls).

9. For claim 1, Applicant requires a method for producing an optically effective system of layers on a substrate having a first side and a second side comprising the steps of applying a protective layer to the second side of the substrate by means of a sputter deposition process or selecting a substrate which has had a protective layer already applied to the second side thereof; and then applying a system of layers to the first side of the substrate by means of a sputter deposition process.

10. Walls discloses making lenses by selecting a substrate with a protective layer **24** on the second side and then depositing a plurality of alleys on the first side by sputtering (col. 1, l. 33-39).

11. For claim 2, Applicant requires the protective layer to be formed by a single layer. Walls uses only one layer **24**.

12. For claim 3, Applicant requires after the layers to have been applied to the first side to apply a system of layers to the second side by sputtering. Walls, deposits several layers on the second side by sputtering after the first side (col. 3, l. 44-49).

13. Claims 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,427,671 to Ahmed.

14. For claim 13, Applicant requires an apparatus for producing an optically effective system of layers on a substrate having a first side and a generally parallel second side comprising an evacuable sputter chamber and a substrate holder with receiving elements for substrates with each receiving element being mounted so that each substrate can be rotated both about a turning

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axis that is oriented substantially parallel to the substrate sides and about an axis of rotation that is oriented substantially perpendicularly to the substrate sides.

15. Ahmed discloses a UVP apparatus (abstract) comprising an evacuable sputtering chamber **10** with a substrate holder **20** that rotates (col. 4, l. 48-49) and rotates the substrates individually (col. 4, l. 56-58).

16. For claim 14, Applicant requires a common drive for the rotary movement and the turning movement. Ahmed discloses a common motor drive **18** for the turning and rotary movements.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,143,143 to Walls et al. (Walls).

19. For claim 10, Applicant requires the protective layer to be applied to a thickness of 10-40 nm.

20. Walls does not disclose the thickness of the protective layer, but discloses that the layer must be sufficient to prevent back scattering and must be easily removable (col. 4, l. 48-63). The thickness, therefore, would be a result effective variable. The thickness must be sufficient to prevent back scattering and must be thin enough to be easily removable.

21. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the protective layer as a thickness of 10-40 nm because it has been held that

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discovering an optimum value of a result effective variable involves only routine skill in the art.

In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Allowable Subject Matter

22. Claims 4-6, 9, and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

23. Claims 7, 8, and 11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

24. The following is a statement of reasons for the indication of allowable subject matter: it is neither anticipated nor obvious over the prior art of record to have a method for producing an optically effective system of layers on a substrate having a first side and a second side as claimed by Applicant in claims 4, 5, 9, 11, or 12.

25. Walls does not match the protective layer to the optical properties of a further system of layers because Walls removes the protective layer before depositing the adhesion layer and further layers on the second side. Walls does not indicate the manner of the protective layer deposition, but does disclose that the layer must be easily removed. Walls suggests that the protective layer can be foam, gel, adhesive membrane, or release agent (col. 4, l. 61-62). Walls does not disclose the layer to be silicon oxide, silicon nitride, aluminum oxide, or aluminum nitride. Walls does not disclose selecting the material of the protective layer or the thickness in any manner in coordination with the application of layers to the front side. Walls also does not

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disclose the protective layer to be more than one layer. Modifying Walls to include any of the above limitations would require hindsight.

General Information

For general status inquiries on applications not having received a first action on the merits, please contact the Technology Center 1700 receptionist at (571) 272-1700.

For inquiries involving Recovery of lost papers & cases, sending out missing papers, resetting shortened statutory periods, or for restarting the shortened statutory period for response, please contact Denis Boyd at (571) 272-0992.

For general inquiries such as fees, hours of operation, and employee location, please contact the Technology Center 1700 receptionist at (571) 272-1300.

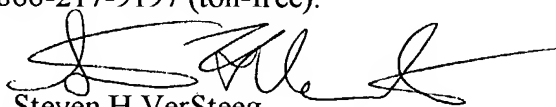
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven H VerSteeg whose telephone number is (571) 272-1348. The examiner can normally be reached on Mon - Thurs (6:30 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven H VerSteeg
Primary Examiner
Art Unit 1753

shv
May 18, 2004